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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,360	02/11/2004	Eun-Jung Kim	678-1347	3202
66547 7590 05/29/2008 THE FARRELL LAW FIRM, P.C. 333 EARLE OVINGTON BOULEVARD SUITE 701 UNIONDALE, NY 11553				
EXAMINER				
HASHEM, LISA				
ART UNIT		PAPER NUMBER		
2614				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/776,360

**Applicant(s)**

KIM ET AL.

**Examiner**

LISA HASHEM

**Art Unit**

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities: the acronym 'US' is used instead of 'UE'. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,701,155 by Sarkkinen et al, hereinafter Sarkkinen, in view of U.S. Pat. No. 7,031,708 by Sarkkinen et al, hereinafter Sarkkinen-'708.

Regarding claim 1, Sarkkinen discloses a method for managing information about user equipments (UEs) (Fig. 1: 11, 12) (col. 2, line 61 – col. 3, line 6) in a mobile communication system (Fig. 1) for providing a MBMS (Multimedia Broadcast/Multicast Service) services to the UEs (col. 1, lines 46-52), the mobile communication system including a Node B (Fig. 1: 21-24) (col. 2, line 66 – col. 3, line 1), a plurality of the UEs capable of communicating with the Node B in a cell occupied by the Node B, and a radio network controller (RNC) (Fig. 1, 30) for controlling communication of the Node B (col. 2, line 63 – col. 3, line 11), a serving GPRS (General Packet Radio Service) support node (SGSN) (Fig. 1, 56) for managing the RNC, and the UEs to provide a packet switched (PS) service and a circuit switched (CS) service to the UEs (col. 3, lines 29-39), the method comprising the steps of:

transmitting MBMS service-related information of a UE (col. 9, lines 1-31) after joining at least one MBMS service (col. 8, line 49 – col. 9, line 1), from the UE to the RNC (col. 9, lines 1-13); and storing the MBMS service-related information in a first service context for the MBMS service held in the RNC, together with managing information about the UE (col. 1, lines 55-67; col. 4, lines 1-30; col. 7, lines 24-47).

Sarkkinen discloses providing MBMS services to UEs. However, Sarkkinen does not disclose transmitting MBMS service-related information of a UE that is in a PMM-Idle mode.

Sarkkinen-708 discloses a method for managing information about user equipments (UEs) (Fig. 2, 14) (col. 5, line 59 – col. 6, line 6) in a mobile communication system (Fig. 2, 12) for providing a MBMS (Multimedia Broadcast/Multicast Service) services to the UEs (col. 3, lines 58-65; col. 4, lines 51-53), the mobile communication system including a Node B (Fig. 2, 16), a plurality of the UEs capable of communicating with the Node B in a cell occupied by the Node B, and a radio network controller (RNC) (Fig. 2, 12) for controlling communication of the Node B (col. 1, lines 18-23), the method comprising the steps of:

transmitting MBMS service-related information of a UE (Fig. 2, 102; col. 3, lines 58-65; col. 5, lines 51-58) that is in a Packet Mobility Management-Idle (PMM-Idle) mode (Fig. 2, 21; col. 2, lines 28-33; col. 6, lines 25-28) after joining at least one MBMS service (col. 3, lines 33-42), from the UE (col. 3, lines 58-65; col. 5, lines 51-58).

Again, Sarkkinen discloses the claimed method except Sarkkinen transmits MBMS service-related information of a UE after joining at least one MBMS service rather than transmitting MBMS service-related information of a UE that is in a PMM-Idle mode.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Sarkkinen to include transmitting MBMS service-related information of a UE that is in a PMM-Idle mode as taught by Sarkkinen-'708. One of ordinary skill in the art would have been lead to make such a modification of Sarkkinen to manage information on a UE that joined an MBMS service but is in a PMM-Idle mode, such as the PMM-Idle mode of Sarkkinen-'708, to the UE of Sarkkinen so the UE can utilize MBMS services in all communication modes.

Regarding claim 2, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 3, please see Sarkkinen (col. 9, lines 1-15).

Regarding claim 4, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 5, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 6, please see Sarkkinen (col. 5, line 16 and lines 28-30; col. 9, lines 38-40).

Regarding claim 7, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 8, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 9, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 10, please see Sarkkinen (col. 9, lines 1-15).

Regarding claim 11, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 12, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 13, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 14, please see Sarkkinen (col. 5, line 50 – col. 6, line 11).

Regarding claim 15, please see Sarkkinen (col. 5, line 60 – col. 6, line 11).

Regarding claim 16, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 17, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 18, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 19, please see Sarkkinen (col. 5, line 50 – col. 6, line 11).

Regarding claim 20, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 21, please see Sarkkinen (col. 6, lines 20-35).

Regarding claim 22, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 23, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 24, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 25, please see Sarkkinen (col. 6, lines 20-35).

Regarding claim 26, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 27, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 28, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 29, please see Sarkkinen-708 (col. 6, lines 25-28).

Regarding claim 30, Sarkkinen discloses a method for managing information about user equipments (UEs) (Fig. 1: 11, 12) (col. 2, line 61 – col. 3, line 6) in a mobile communication system (Fig. 1) for providing a MBMS (Multimedia Broadcast/Multicast Service) service to the UEs (col. 1, lines 46-52), the system including a Node B (Fig. 1: 21-24) (col. 2, line 66 – col. 3, line 1), a plurality of the UEs capable of communicating with the Node B in a cell occupied by the Node B, and a radio network controller (RNC) (Fig. 1, 30) for controlling communication of the Node B (col. 2, line 63 – col. 3, line 11) and the UEs to provide a packet switched (PS) service and a circuit switched (CS) service to the UEs (col. 3, lines 29-39), and a serving node

(Fig. 1, 56) for managing the RNC, the method comprising the steps of:

transmitting MBMS service-related information of a UE (col. 9, lines 1-31) after joining at least one MBMS service (col. 8, line 49 – col. 9, line 1), from the UE to the serving node (col. 9, lines 1-13); and linking the MBMS service-related information with information about the UE (col. 9, lines 1-40); storing the MBMS service-related information in a first service context for the MBMS service held in the RNC, together with managing information about the UE (col. 1, lines 55-67; col. 4, lines 1-30; col. 7, lines 24-47).

Sarkkinen discloses providing MBMS services to UEs. However, Sarkkinen does not disclose transmitting MBMS service-related information of a UE that is in a PMM-Idle mode.

Sarkkinen-708 discloses a method for managing information about user equipments (UEs) (Fig. 2, 14) (col. 5, line 59 – col. 6, line 6) in a mobile communication system (Fig. 2, 12) for providing a MBMS (Multimedia Broadcast/Multicast Service) service to the UEs (col. 3, lines 58-65; col. 4, lines 51-53), the system including a Node B (Fig. 2, 16), a plurality of the UEs capable of communicating with the Node B in a cell occupied by the Node B, a radio network controller (RNC) (Fig. 2, 12) for controlling communication of the Node B (col. 1, lines 18-23), the method comprising the steps of:  
transmitting MBMS service-related information of a UE (Fig. 2, 102; col. 3, lines 58-65; col. 5, lines 51-58) that is in a Packet Mobility Management-Idle (PMM-Idle) mode (Fig. 2, 21; col. 2, lines 28-33; col. 6, lines 25-28) after joining at least one MBMS service (col. 3, lines 33-42), from the UE (col. 3, lines 58-65; col. 5, lines 51-58).

Again, Sarkkinen discloses the claimed method except Sarkkinen transmits MBMS service-related information of a UE after joining at least one MBMS service rather than transmitting MBMS service-related information of a UE that is in a PMM-Idle mode.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the method of Sarkkinen to include transmitting MBMS service-related information of a UE that is in a PMM-Idle mode as taught by Sarkkinen-'708. One of ordinary skill in the art would have been lead to make such a modification of Sarkkinen to manage information on a UE that joined an MBMS service but is in a PMM-Idle mode, such as the PMM-Idle mode of Sarkkinen-'708, to the UE of Sarkkinen so the UE can utilize MBMS services in all communication modes.

Regarding claim 31, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 32, please see Sarkkinen (col. 9, lines 1-15).

Regarding claim 33, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 34, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 35, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 36, please see Sarkkinen (col. 3, lines 13-28).

Regarding claim 37, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 38, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 39, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 40, please see Sarkkinen (col. 9, lines 32-40).

Regarding claim 41, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 42, please see Sarkkinen (col. 5, line 60 – col. 6, line 11).



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Regarding claim 43, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 44, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 45, please see Sarkkinen (col. 9, lines 16-31).

Regarding claim 46, please see Sarkkinen (col. 6, lines 20-35).

Regarding claim 47, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 48, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 49, please see Sarkkinen (col. 9, lines 1-31).

Regarding claim 50, please see Sarkkinen (col. 9, lines 1-40).

Regarding claim 51, please see Sarkkinen-'708 (col. 6, lines 25-28).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.
5. Any response to this action should be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(571) 273-8300 (for formal communications intended for entry)

**Or call:**

(571) 272-2600 (for customer service assistance)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Tsang/  
Supervisory Patent Examiner, Art Unit 2614

/Lisa Hashem/  
Examiner, Art Unit 2614  
May 30, 2008